#### § 190.10

period in which he is engaged in carrying out any operation which is part of a nuclear fuel cycle.

(1) Regulatory agency means the government agency responsible for issuing regulations governing the use of sources of radiation or radioactive materials or emissions therefrom and carrying out inspection and enforcement activities to assure compliance with such regulations.

## Subpart B—Environmental Standards for the Uranium Fuel Cycle

## § 190.10 Standards for normal operations.

Operations covered by this subpart shall be conducted in such a manner as to provide reasonable assurance that:

(a) The annual dose equivalent does not exceed 25 millirems to the whole body, 75 millirems to the thyroid, and 25 millirems to any other organ of any member of the public as the result of exposures to planned discharges of radioactive materials, radon and its daughters excepted, to the general environment from uranium fuel cycle operations and to radiation from these operations.

(b) The total quantity of radioactive materials entering the general environment from the entire uranium fuel cycle, per gigawatt-year of electrical energy produced by the fuel cycle, contains less than 50,000 curies of krypton-85, 5 millicuries of iodine-129, and 0.5 millicuries combined of plutonium-239 and other alpha-emitting transuranic radionuclides with half-lives greater than one year.

# § 190.11 Variances for unusual operations.

The standards specified in §190.10 may be exceeded if:

(a) The regulatory agency has granted a variance based upon its determination that a temporary and unusual operating condition exists and continued operation is in the public interest, and

(b) Information is promptly made a matter of public record delineating the nature of unusual operating conditions, the degree to which this operation is expected to result in levels in excess of the standards, the basis of the vari-

ance, and the schedule for achieving conformance with the standards.

#### § 190.12 Effective date.

(a) The standards in §190.10(a) shall be effective December 1, 1979, except that for doses arising from operations associated with the milling of uranium ore the effective date shall be December 1, 1980.

(b) The standards in §190.10(b) shall be effective December 1, 1979, except that the standards for krypton-85 and iodine-129 shall be effective January 1, 1983, for any such radioactive materials generated by the fission process after these dates

## PART 191—ENVIRONMENTAL RADI-ATION PROTECTION STANDARDS FOR MANAGEMENT AND DIS-POSAL OF SPENT NUCLEAR FUEL, HIGH-LEVEL AND TRANSURANIC RADIOACTIVE WASTES

## Subpart A—Environmental Standards for Management and Storage

Sec.

191.01 Applicability.

191.02 Definitions.

191.03 Standards.

191.04 Alternative standards.

191.05 Effective date.

#### Subpart B—Environmental Standards for Disposal

191.11 Applicability.

191.12 Definitions.

191.13 Containment requirements.

191.14 Assurance requirements.

191.15 Individual protection requirements.

191.16 Alternative provisions for disposal.

191.17 Effective date.

#### Subpart C—Environmental Standards for Ground-Water Protection

191.21 Applicability.

191.22 Definitions.

191.23 General provisions.

191.24 Disposal standards.

191.25 Compliance with other Federal regulations.

191.26 Alternative provisions.

191.27 Effective date.

APPENDIX A TO PART 191—TABLE FOR SUBPART B

APPENDIX B TO PART 191—CALCULATION OF ANNUAL COMMITTED EFFECTIVE DOSE

APPENDIX C TO PART 191—GUIDANCE FOR IMPLEMENTATION OF SUBPART B

## **Environmental Protection Agency**

AUTHORITY: The Atomic Energy Act of 1954, as amended, 42 U.S.C. 2011–2296; Reorganization Plan No. 3 of 1970, 5 U.S.C. app. 1; the Nuclear Waste Policy Act of 1982, as amended, 42 U.S.C. 10101–10270; and the Waste Isolation Pilot Plant Land Withdrawal Act, Pub. L. 102–579. 106 Stat. 4777.

Source: 50 FR 38084, Sept. 19, 1985, unless otherwise noted.

## Subpart A—Environmental Standards for Management and Storage

#### §191.01 Applicability.

This subpart applies to:

- (a) Radiation doses received by members of the public as a result of the management (except for transportation) and storage of spent nuclear fuel or high-level or transuranic radioactive wastes at any facility regulated by the Nuclear Regulatory Commission or by Agreement States, to the extent that such management and storage operations are not subject to the provisions of part 190 of title 40; and
- (b) Radiation doses received by members of the public as a result of the management and storage of spent nuclear fuel or high-level or transuranic wastes at any disposal facility that is operated by the Department of Energy and that is not regulated by the Commission or by Agreement States.

#### §191.02 Definitions.

Unless otherwise indicated in this subpart, all terms shall have the same meaning as in Subpart A of Part 190.

- (a) Agency means the Environmental Protection Agency.
- (b) Administrator means the Administrator of the Environmental Protection Agency.
- (c) Commission means the Nuclear Regulatory Commission.
- (d) Department means the Department of Energy.
- (e) NWPA means the Nuclear Waste Policy Act of 1982 (Pub. L. 97–425).
- (f) Agreement State means any State with which the Commission or the Atomic Energy Commission has entered into an effective agreement under subsection 274b of the Atomic Energy Act of 1954, as amended (68 Stat. 919).

- (g) Spent nuclear fuel means fuel that has been withdrawn from a nuclear reactor following irradiation, the constituent elements of which have not been separated by reprocessing.
- (h) High-level radioactive waste, as used in this part, means high-level radioactive waste as defined in the Nuclear Waste Policy Act of 1982 (Pub. L. 97–425).
- (i) Transuranic radioactive waste, as used in this part, means waste containing more than 100 nanocuries of alpha-emitting transuranic isotopes, with half-lives greater than twenty years, per gram of waste, except for: (1) High-level radioactive wastes; (2) wastes that the Department has determined, with the concurrence of the Administrator, do not need the degree of isolation required by this part; or (3) wastes that the Commission has approved for disposal on a case-by-case basis in accordance with 10 CFR Part 61.
- (j) Radioactive waste, as used in this part, means the high-level and transuranic radioactive waste covered by this part.
- (k) Storage means retention of spent nuclear fuel or radioactive wastes with the intent and capability to readily retrieve such fuel or waste for subsequent use, processing, or disposal.
- (1) Disposal means permanent isolation of spent nuclear fuel or radioactive waste from the accessible environment with no intent of recovery, whether or not such isolation permits the recovery of such fuel or waste. For example, disposal of waste in a mined geologic repository occurs when all of the shafts to the repository are backfilled and sealed.
- (m) Management means any activity, operation, or process (except for transportation) conducted to prepare spent nuclear fuel or radioactive waste for storage or disposal, or the activities associated with placing such fuel or waste in a disposal system.
- (n) Site means an area contained within the boundary of a location under the effective control of persons possessing or using spent nuclear fuel or radioactive waste that are involved in any activity, operation, or process covered by this subpart.